Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Currently Amended) An in-vitro blood plasma lipids filtering method, comprising the following steps:

collecting blood from a patient by a blood collecting device;

separating blood plasma from the collected blood by a blood separating device connected to the blood collecting device, wherein the separated blood plasma enters a pre-filtered blood plasma bag which includes an automatic weight or volume detection device for transmitting a signal that triggers a stop response to the blood separating device or the blood collecting device when the pre-filtered blood plasma bag is full;

flushing a blood plasma lipids filtering device connected to the pressure control device with saline solution from a saline solution treatment bag connected to an outlet of the pre-filtered blood plasma bag, wherein the flushed saline solution from the blood plasma lipids filtering device flows into a waste saline solution bag connected to the blood plasma lipids filtering device;

controlling pressure of the separated blood plasma from the pre-filtered blood plasma bag by a pressure control device connected to the pre-filtered blood plasma bag;

passing the separated blood plasma through the blood plasma lipids filtering device for filtering out lipids of the separated blood plasma, wherein the blood plasma lipids filtering device comprises multi-layers of thin film membranes of which at least a first film is a membrane excluding hollow fibers of hollow fiber contactor (HFC) and having

filter aperture pores of about 0.3 to 0.65 microns and comprises a lipid absorptive material for filtering out lipids of the separated blood plasma, a second film is a membrane that has filter aperture pores of about 0.3 microns for filtering out bacterium and chyle-lipoprotein, and a third film is a membrane that has filter aperture pore of about 0.2 microns and comprises nylon as a base material for filtering out foreign particles generated from the first and second filtering processes, wherein the foreign particles include thin film wood-pulp material or adsorptive particles, wherein at least one additional first film is further interposed between the second and third films, and wherein the lipid absorptive material of the first film and the additional first film comprises silicon oxide pellets;

collecting the filtered blood plasma by a post-filtered blood plasma bag connected to the blood plasma lipids filtering device;

controlling the temperature of the filtered blood plasma from the post-filtered blood plasma bag by a temperature control device connected to the post-filtered blood plasma bag; and

feeding the filtered blood plasma back to the blood of the patient by a blood plasma feedback device connected to the temperature control device.

2. (Previously Amended) The method as claimed in Claim **1**, wherein the separating step comprises a stepwise separation process for separating the collected blood plasma from the blood collecting device at about 150-250 milliliters of the blood plasma each time.

3. (Previously Amended) The method as claimed in Claim **1**, wherein the separated blood plasma passes to the blood plasma lipids filtering device at a speed of 20-30 milliliters per minute, and the speed is controlled by a peristaltic pump connected to the pre-filtered blood plasma bag and the pressure control device.

4. (Previously Amended) The method as claimed in Claim **1**, wherein in the blood plasma

lipids filtering device, the pressure is controlled below 60KPa by the pressure control device.

5. (Previously Amended) The method as claimed in Claim **1** further comprising a step of controlling the temperature of the filtered blood plasma from the post-filtered blood plasma bag approximately equal to body temperature by the temperature control device.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) An in-vitro blood plasma lipids filtering apparatus comprising:

a blood collecting device for collecting blood from a patient;

a blood separating device connected to the blood collecting device for separating the blood plasma from the blood collected by the blood collecting device by centrifugal separation;

a pre-filtered blood plasma bag connected to the blood separating device and including an automatic weight or volume detection device for transmitting a signal that triggers a stop response to the blood separating device or the blood collecting device when the pre-filtered blood plasma bag is full;

a peristaltic pump connected to the pre-filtered blood plasma bag for producing flowing power for the separated blood plasma;

a pressure control device connected to the peristaltic pump for controlling the pressure of the separated blood plasma by adjusting the rotational speed of the peristaltic pump;

a blood lipids filtering device connected to the pressure control device for receives the separated blood plasma and filtering out lipids of the separated blood plasma, wherein the blood plasma lipids filtering device comprises multi-layers of thin film membranes of which at least a first film is a membrane <u>excluding hollow fibers of hollow fiber contactor (HFC) and</u> having filter aperture pores of about 0.3 to 0.65 microns and

comprises a lipid absorptive material for filtering out lipids of the separated blood plasma, a second film is a membrane that has filter aperture pores of about 0.3 microns for filtering out bacterium and chyle-lipoprotein, and a third film is a membrane that has filter aperture pore of about 0.2 microns and comprises nylon as a base material for filtering out foreign particles generated from the first and second filtering processes, wherein the foreign particles include thin film wood-pulp material or adsorptive particles, wherein at least one additional first film is further interposed between the second and third films, and wherein the lipid absorptive material of the first film and the additional first film comprises silicon oxide pellets;

a post-filtered blood plasma bag connected to the blood plasma lipids filtering device for collecting the filtered blood plasma;

a temperature control device connected to the post-filtered blood plasma bag for controlling the temperature of the filtered blood plasma from the post-filtered blood plasma bag; and

a blood plasma feedback device connected to the temperature control device for feeding the filtered blood plasma back into the blood of the patient;

the in-vitro blood plasma lipids filtering apparatus further comprising:

a saline solution treatment bag connected to an outlet of the pre-filtered blood plasma bag for providing saline solution to flush the blood plasma lipids filtering device before the blood lipids filtering device filters out lipids of the separated blood plasma; and

a waste saline solution bag connected to an inlet of the post-filtered blood plasma bag for collecting the flushed saline solution from the blood plasma lipids filtering device during flushing the blood plasma lipids filtering device.

10. (Cancelled)

11. (Previously Amended) The in-vitro blood plasma lipids filtering apparatus as claimed in

Claim **9**, wherein the pre-filtered blood plasma bag has a volume of about 150-250 milliliters.

12. (Previously Amended) The in-vitro blood plasma lipids filtering apparatus as claimed in Claim **9**, wherein the pressure control device indicates a current pressure value and can control the rotational speed of the peristaltic pump.

13. (Previously Amended) The in-vitro blood plasma lipids filtering apparatus as claimed in Claim **9**, wherein the peristaltic pump is controlled to have the rotational speed that induces a flow rate of the separated blood plasma at about 20-30 milliliters every minute.

14. (Previously Amended) The in-vitro blood plasma lipids filtering apparatus as claimed in Claim **9**, wherein the pressure control device controls the pressure to be below 60KPa.

15. (Previously Amended) The in-vitro blood plasma lipids filtering apparatus as claimed in Claim **9**, wherein the temperature control device is used to maintain a constant temperature of the blood plasma.

16. (Previously Amended) The in-vitro blood plasma lipids filtering apparatus as claimed in Claim **9**, wherein the temperature control device is operable to have a highest heating temperature at 38°C.

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)